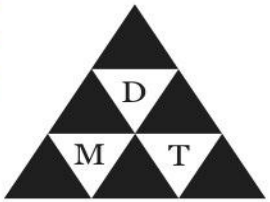
Mathematical Thinking for Instruction Webinar

K-6

Composing and Decomposing

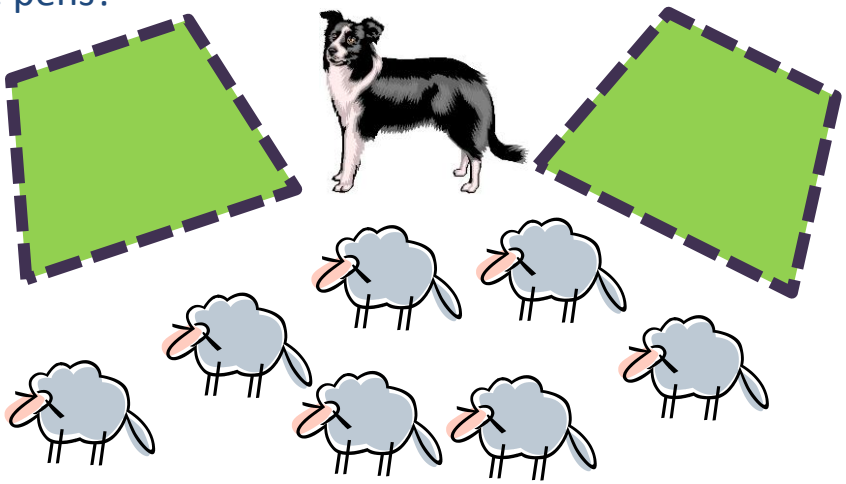
BOISE STATE UNIVERSITY
COLLEGE OF EDUCATION
CENTER FOR SCHOOL IMPROVEMENT & POLICY STUDIES



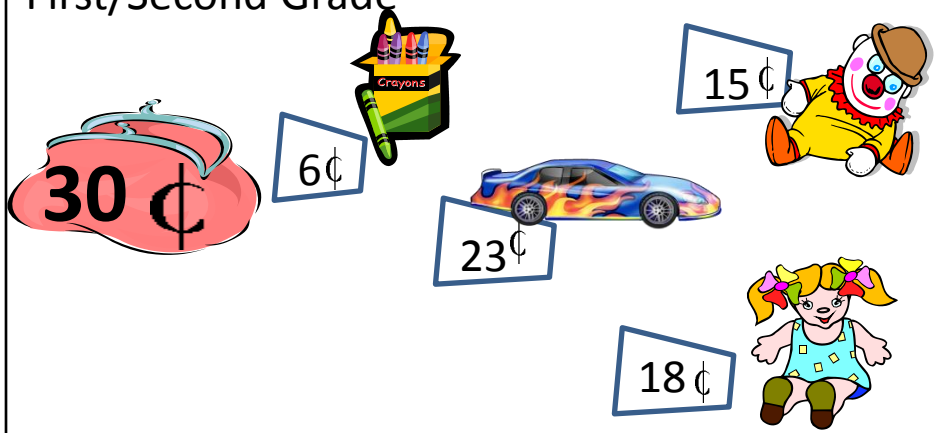
Grade Level	Common Core Standard
Kinder	K.OA.3. Decompose numbers less than or equal to 10 into pairs in more than one way
First	1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums
Second	2.NBT.7.Add and subtract within 1000, using concrete models or drawings and strategies based on place value,…; Understand that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
Third	3.OA.5. Apply properties of operations as strategies to multiply and divide …*3 × 5 × 2 can be found by 3× 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*
Fourth	4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
Fifth	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Kinder-First

Sam the Sheep Dog will herd all of the sheep into 2 pens. How many ways can Sam herd the sheep into the pens?



First/Second Grade-



If you buy one toy, how much money will you have left?_____

How do you know you are correct?

Third/Fourth Grade-

The Flicks theater has a room with 17 rows of seats. Each row consists of 8 seats. How many people is the room able to seat?

Fifth and Sixth Grade-

An apple farmer fills each jug with 1.7 liters of cider. Find out how many liters the following number of jugs hold:

2, 8, 10, 15

If a barrel can hold 289 liters of cider. How many jugs can the farmer fill?

Thank you for attending the webinar!

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- DMT Website- http://dmt.boisestate.edu

- Follow Up Opportunities:

http://www.tinyurl.com/mtifollowup